UNITED STATES DEPARTMENT OF AGRICULTURE ANIMAL AND PLANT HEALTH INSPECTION SERVICE VETERINARY SERVICES

UNIFORM METHODS AND RULES--BOVINE TUBERCULOSIS ERADICATION

Uniform Methods and Rules for the Establishment and Maintenance of Tuberculosis-Free Accredited Herds of Cattle, Modified Accredited Areas, and Areas Accredited Free of Bovine Tuberculosis in the Domestic Bovine

Adopted by the United States Animal Health Association on November 2, 1978, and approved by the Animal and Plant Health Inspection Service Veterinary Services, USDA effective April 1, 1979

TABLE OF CONTENTS

MINIMUM STANDARDS

| PART I | DEFINITIONS | | | |
|-----------|---|--|--|--|
| PART II | OFFICIAL TEST PROCEDURES | | | |
| PART III | DISPOSITION OF TUBERCULIN RESPONSE CATTLE | | | |
| PART IV | QUARANTINE PROCEDURES | | | |
| PART V | SPECIAL RETESTS OF HIGH-RISK HERDS | | | |
| PART VI | CLEANING AND DISINFECTION OF PREMISES | | | |
| PART VII | ORIGIN OF INFECTION | | | |
| PART VIII | IDENTIFICATION OF LIVESTOCK | | | |
| PART IX | ACCREDITED HERD PLAN | | | |
| PART X | MODIFIED ACCREDITED AREA STATUS | | | |
| | | | | |

PART XI ACCREDITED FREE STATE

*Identifies all changes from the previous edition

Part I: Definitions

- 1. "Bovine Tuberculosis"—a disease in cattle caused by $\underline{\text{Mycobacterium}}$ bovis.
- 2. "Bovine Tuberculosis Eradication"—eradication is the complete elimination of bovine tuberculosis from cattle in a State so that it does not appear unless introduced from another species or from outside the State.
 - 3. "Cattle"--cattle refers to domestic bovine animals of all ages.
 - 4. "Natural Additions"--animals born and raised in the herd.
- 5. "Herd"—a herd is a group of cattle maintained on common ground for any purpose, or two or more groups of cattle under common ownership or supervision, geographically separated, but which have an interchange or movement of cattle without regard to health status (a group is construed to mean one or more animals).
- 6. "Tuberculin"--a product that is approved by and produced under license of the USDA for injection into cattle for the purpose of detecting bovine tuberculosis.
- 7. "Official Tuberculin Test"--a test for tuberculosis applied and reported by approved personnel in accordance with these Uniform Methods and Rules.
- 8. "Comparative-Cervical Tuberculin Test"--the injection of standardized mammalian and avian tuberculin at separate sites in the cervical area and a determination as to the probable presence of mammalian tuberculosis by comparing the responses of the two tuberculins.
- 9. "Passed Herd"--herd in which no animals were classified as reactors or suspects on the herd test.
- 10. "Annual Test"--tests conducted at intervals of not less than 10 months nor more than 14 months.
- 11. "No Gross Lesion (NGL) Animal"—an animal in which a lesion(s) of tuberculosis is not found during slaughter inspection. (An animal with skin lesions only will be considered in the same category as an NGL).
- 12. "Accredited Herd"--an accredited herd is one which has passed at least two consecutive annual tuberculin tests and no other evidence of bovine tuberculosis has been disclosed and meets the standards of these Uniform Methods and Rules.

- 13. "Modified Accredited Area"--a State or portion thereof which is actively participating in the eradication of tuberculosis and which maintains its status in accordance with these Uniform Methods and Rules.
- 14. "Accredited Free State"--a State which maintains full compliance with these Uniform Methods and Rules and no evidence of bovine tuberculosis has been disclosed for 5 or more years.
- 15. "Herd Depopulation"--removal of all cattle in the herd direct to slaughter prior to any restocking of the premises with cattle.
- 16. "Direct to Slaughter"--direct to slaughter shall mean the shipment of cattle from the premises of origin directly to a slaughter establishment without diversion to assembly points, such as auctions, public stockyards, and feedlots.
- 17. "Quarantined Feedlot"—A quarantined feedlot shall be a confined area under the direct supervision and control of the State Livestock Official who shall establish procedures for accounting of all animals entering or leaving such quarantined feedlot. The quarantined feedlot shall be maintained for finish feeding of animals in drylot with no provisions for pasturing and grazing. All animals leaving such feedlot must move only direct to slaughter in accordance with established procedures for handling quarantined animals.
- * 18. "Routine Screening Tuberculin Test"--caudal fold tuberculin tests *conducted as part of an area eradication program in which all responding *animals are reported to the appropriate animal health official.

Part II: Official Test Procedures

×

*

*

- A. Authority to Test. State laws and/or regulations shall provide authority to apply a tuberculin test to any animal or herd at such times as may be deemed necessary by the cooperating State and Federal officials. These officials reserve the right to supervise any test conducted by an accredited veterinarian.
- B. Restriction of Personnel to Apply Tuberculin Test. Tuberculin tests shall be applied by a veterinarian employed in a full-time capacity by the State, or the USDA, or by an accredited veterinarian. Technicians jointly approved by State and Federal Governments may conduct routine screening tuberculin tests when directly supervised by State or Federal veterinarians.
 - C. <u>Caudal Fold Test</u>. The official tuberculin test for routine use shall be the intradermic injection of 0.1 cc. of tuberculin in the caudal fold.
- * D. Single Cervical Test. This test is recommended for use in herds

 * affected with bovine tuberculosis and for testing exposed cattle from

 * such herds. It shall be applied only by a veterinarian employed in

 * a full-time capacity by the State or Federal Government.

- E. <u>Comparative-Cervical Test</u>. The official tuberculin test for retesting suspects and deviators shall be applied by a full-time State or Federal regulatory veterinarian.
- F. Requirements for Special Procedures in Infected Herds. All cattle in herds from which tuberculous cattle originate and all cattle that are known to have associated with infected cattle shall be tested promptly. Cattle in feedlots known to be exposed to tuberculous cattle shall be quarantined and shipped under permit directly to slaughter. Disclosure of tuberculosis in any herd shall be followed by a complete epidemiological investigation. Every effort must be made to assure that immediate elimination of the disease from all species of domestic livestock on the premises.
- G. <u>Tuberculin Test Interpretation</u>. Decisions will be based upon the professional judgment of the testing veterinarian in accordance with the policy established by the cooperating State and Federal officials.

The injection site on each animal shall be palpated. Observation without palpation is not acceptable.

The following are guidelines for classification of cattle tested:

1. Caudal fold test--

- a. Reactor "R" Animals showing a circumscribed swelling 5 mm. in diameter (3/16 of an inch) (P_1) or a diffuse swelling twice as thick as the normal caudal fold (X_2) or greater response to tuberculin on routine test should be classified as reactors unless in the professional judgment of the testing veterinarian a suspect classification is justified.
- b. Suspect "S" Animals showing a response to tuberculin not classified as reactor with the exception noted below.
- c. Deviator "D" Animals showing a minimal response to tuberculin. This is usually designated as a pinpoint (PP) response.
- d. Negative "N" Animals showing no response to tuberculin or those animals with responses which have been classified negative for $\underline{\mathsf{M}}$. bovis by the comparative-cervical tuberculin test.
- 2. Comparative-Cervical Test--Responses shall be reported and plotted on the scattergram. Classification shall be according to the scattergram.
- Single Cervical Test--All animals with a response shall be classified as a reactor. Responses shall be recorded in millimeters.

- * H. Restriction of Responding Animals for Interstate or International

 Movement. No animal with a response to an official tuberculin test is eligible for international movement. In addition, no animal with a response to an official tuberculin test is eligible for interstate movement unless said animal is subsequently classified "negative for M. bovis" based upon an official comparative-cervical test.
 - I. Report of Tuberculin Tests. A report of all tuberculin tests, including the individual identification of each animal by eartag number or tattoo, age, sex, breed, and a record of the size of the responses, shall be submitted in accordance with the requirements of the cooperating State and Federal officials.

Part III: Disposition of Tuberculin Response Cattle

A. Disposition of Reactors

- 1. Reactors must remain on the premises where disclosed until a State or Federal permit for movement has been obtained. Movement for immediate slaughter must be direct to a slaughter establishment where approved State or Federal inspection is maintained within 15 days of classification or otherwise be destroyed under the direct supervision of a regulatory veterinarian to assure that the carcass is either cooked or condemned.
- 2. No animal classified as a reactor shall be retested.

B. <u>Disposition</u> of Suspects

- 1. Suspects to the tuberculin test shall be quarantined to the premises where found until:
 - a. Retested by the comparative-cervical tuberculin test within 10 days of the caudal fold injection, or
 - b. Retested by the comparative-cervical tuberculin test after 60 days, or
 - c. Shipped under permit direct to slaughter in accordance with State and Federal laws and regulations.

C. Deviators

- 1. Record response for complete animal health history.
- 2. Interstate movement of deviators classified negative for \underline{M} . bovis by the comparative-cervical tuberculin test should not be restricted.

Part IV: Quarantine Procedures

1. All herds in which reactor animals are disclosed shall be quarantined. Exposed animals must remain on the premises where disclosed unless a

State or Federal permit has been obtained. Movement for immediate slaughter must be direct to a slaughtering establishment where approved State or Federal inspection is maintained.

- 2. Sales of feeder calves from quarantined herds will be restricted. Feeder calves under 12 months of age that have passed a tuberculin test within 60 days may be permitted to move intrastate to a quarantined feedlot.
- 3. Herds in which Mycobacterium bovis infection has been disclosed shall remain under quarantine and must pass two tuberculin tests at intervals of at least 60 days and one additional test after 6 months. A case will be considered "Mycobacterium bovis infection" when a pathologic (granulomatous) lesion in cattle suspected of being tuberculosis is found unless a satisfactory examination at an accredited laboratory justifies a diagnosis other than bovine-type tuberculosis. Exception lesions that occur only in the mesenteric lymph nodes.
- 4. Herds in which NGL reactor(s) only occur and no evidence of Myco-bacterium bovis infection has been disclosed may be released from quarantine after a 60-day negative retest on the entire herd.
- 5. Suspects in herds where only suspect animals are disclosed shall be quarantined to the premises until retested and classified negative or shipped direct to slaughter under permit.

Part V: Special Retests of High-Risk Herds

- 1. In herds where <u>Mycobacterium bovis</u> infection has been confirmed but the herd not depopulated, five annual tests on the entire herd followed by two tests at 3-year intervals shall be applied following the release of quarantine.
- In herds with history of lesions suspicious of bovine tuberculosis (not confirmed), two complete annual herd tests shall be applied after release of quarantine; the first test to be applied approximately 1 year after release of quarantine.
- 3. In a newly assembled herd on a premises where a tuberculous herd has been depopulated, two annual herd tests shall be applied to all cattle; the first test to be applied approximately 6 months after assembly of the new herd. These tests shall be followed by two complete herd tests at 3-year intervals. If the premises are vacated for 1 year, these requirements may be waived.
- 4. Exposed animals previously sold from a known infected herd shall be depopulated with indemnity if at all possible. If not depopulated, only the cervical test shall be used. All responding animals shall be classified as reactors. If negative to the test, the exposed animal shall be retested in 1 year. The balance of the receiving herd shall be tested as follows:

- a. If lesions of tuberculosis (based on histopathologic examination) are found on the exposed reactor, the remainder of the herd shall be tested, preferably with the cervical test.
- b. In all other cases the remainder of the herd shall be tested by the caudal fold test, with responding animals classified as suspects and retested with the comparative-cervical test.
- 5. The testing of source herds of regular-kill animals having lesions of tuberculosis shall be done by full-time employed State or Federal regulatory veterinarians. If the herd of origin is positively identified, all animals responding to the caudal fold test shall be classified as reactors. Only when the herd of origin is not positively identified should the comparative-cervical test be used to classify animals that respond to the caudal fold test.
- 6. Testing of source herds of reactors shall be by full-time employed State or Federal regulatory veterinarians using the caudal fold test procedure, and responding animals shall be classified as reactors or retested by the comparative-cervical test.

Part VI: Cleaning and Disinfection of Premises

1. Premises where tuberculous cattle have been maintained shall be thoroughly cleaned and disinfected with a disinfectant permitted by the Animal and Plant Health Inspection Service, USDA, and in a manner satisfactory to the cooperating State and Federal authorities.

Part VII: Origin of Infection

1. Tuberculosis found during slaughter inspection or otherwise in any bovine will be considered to have originated in the State where slaughtered or disclosed unless successful traceback procedures identify the source to another State.

Part VIII: Identification of Livestock

- 1. All cattle tested shall be individually identified by official eartag or other satisfactory means. Devices such as neck chains that are easily removed and transferred are not considered satisfactory.
- 2. The State shall 1/ have and enforce dealer control laws and/or regulations that require dealers to maintain identification of cattle and records of transactions for each animal purchased or sold.
- 3. Cattle moved in channels of trade within a State shall be identified and recorded as to origin and destination at the first concentration point, (dealer, livestock auction, stockyard, etc.) as follows:
 - a. Cattle over 2 years of age that are returned to farms or ranches, including feeding cattle, shall / be identified by official eartag or by an official brand. If identified by brand, cattle must be accompanied by an official brand release.

- b. Cattle that are marketed for immediate slaughter shall be identified by eartag, saletag, or official backtag. An official brand release will be acceptable identification for lots of animals of unmixed origin that are shipped directly to slaughter.
- c. Cattle without individual identification may be moved directly to and maintained in a quarantined feedlot under control of the State livestock sanitary official, provided they are inspected in the feedlot and are moved to slaughter under permit at the end of the feeding period.

 $\frac{1}{The}$ word "shall" will apply to those States which are to be considered for Accredited Free Status. The word "should" may be substituted for States with a Modified Accredited Status only.

Part IX: Accredited Herd Plan

- 1. Animals to be tested Testing of herds for accreditation or reaccreditation shall include all cattle over 24 months of age and any animals other than natural additions under 24 months of age. All natural additions shall be individually identified and recorded on the test report as members of the herd at the time of the annual test.
- 2. Additions Herd additions must originate directly from one of the following:
 - a. Accredited herd.
 - b. Herd in an Accredited Free State.
 - c. Herd in a Modified Accredited Area that has passed a herd test of all animals over 24 months of age within 12 months, and the individual animals for addition were negative to the tuberculin test conducted within 60 days.
 - d. Herd in a Modified Accredited Area not meeting requirements of (a), (b), or (c) or this paragraph, individual animals for addition must pass a negative test within 60 days prior to entering the premises of the accredited herd and must be kept in isolation from all members of the accredited herd until negative to a test conducted after 60 days of date of entry.

Animals added under (b), (c), and (d) shall not receive accredited herd status for sale purposes until they have been members of the herd at least 60 days and are included in a herd retest.

3. Accreditation and reaccreditation — To qualify for accredited herd status, the herd must pass at least two consecutive annual tuberculin tests with no evidence of bovine tuberculosis disclosed. All animals must be bona fide members of the herd. Qualified herds may be issued a certificate by the local State and Federal officials. The accreditation period will be 12 months (365 days) from the anniversary date and not 12 months from the date of the reaccreditation test. To qualify for reaccreditation the herd must pass an annual test within a period of 10 to 14 months of the anniversary date.

Part X: Modified Accredited Area Status

1. TESTING AND SLAUGHTER SURVEILLANCE

An annual report shall be submitted for each State or appropriate subdivision at the close of each fiscal year to show the amount of testing and slaughter surveillance that has been conducted.

- 2. TRACE TESTING
- a. All cattle in herds of origin or cattle associated with those sh_{Owi} evidence of tuberculosis at time of slaughter must be quarantined a tested.
- b. The testing schedule of all reactor and suspect herds must be curre:
- 3. REVOCATION OR SUSPENSION OF STATUS

Disclosure of tuberculosis in the area and/or failure to take progresive steps to comply with these Uniform Methods and Rules to seek or and eliminate tuberculosis shall be cause for revocation or suspension of the Modified Accredited Status.

Part XI: Accredited Free State

- 1. A State may be listed as Accredited Free if the State complies with all of the procedures in these Uniform Methods and Rules and no evidence of tuberculosis has been found for 5 or more years.
- 2. Disclosure of tuberculosis in an Accredited Free State will be sufficient justification for revocation or suspension of the Accrediffree Status. After all epidemiological studies have been completed and all exposed herds have been tested and it has been established that there has been no spread from the herd, the State may be considered for reinstatement of its Free Status.